VFR TERMINAL AREA CHART
SEATTLE/PORTLAND

SEATTLE FLYWAY

SEATTLE/ PORTLAND

Airports having Control Towers are shown in Blue, all others in Magenta. Consult Chart Supplement for details involving airport lighting, navigation aids, and services. All times are local. For additional symbol information refer to the Chart User's Guide.

AIRPORTS

Other than hard-surfaced runways

Seaplane Base

Hard-surfaced runways 1500 ft. or greater

Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, DME or VORTAC location.

All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.

ADDITIONAL AIRPORT INFORMATION

Private *(Pvt)* - Non-public use having landmark value

Military - Other than hard-surfaced; all military airports are identified by abbreviations AFB, NAS, AAF, etc.

Heliport Selected

Unverified

Abandoned - paved having landmark value, 3000 ft. or greater

Ultralight Flight Park Selected

Fuel availability indicated by use of tick marks around basic airport symbol. Consult Supplement for details and availability at airports with hard-surfaced runways 1500 ft. or greater.

★ Rotating airport beacon in operation Sunset to Sunrise

OBJECTIONABLE - Airport may adversely affect airspace use.

AIRPORT DATA

Box indicates FAR 93, Special Air Traffic Rules & Airport Traffic Area. Runways with Right Traffic Patterns (public use).
* RP Special conditions exist - see Supplement.
FSS - Flight Service Station
NO SVFR - Fixed-wing special VFR flight is prohibited.
CT - 118.3 - Control Tower (CT) - primary frequency
★ - Star indicates operation part-time. See tower frequencies tabulation for hours of operation.
Ⓐ - Follows the Common Traffic Advisory Frequency (CTAF)
ATIS 123.8 - Automatic Terminal Information Service
AWOS 135.2 - Automatic Flight Information Service (AIS)
ASOS/AWOS 135.42 - Automated Surface Observing Systems (shown where full-time ATIS not available). Some ASOS/AWOS facilities may not be located at airports.
UNICOM - Aeronautical advisory station
VFR Advsy - VFR Advisory Service shown where full-time ATIS not available and frequency is other than primary CT frequency.
285 - Elevation in feet
L - Lighting in operation Sunset to Sunrise
*L - Lighting limitations exist; refer to Supplement.
72 - Length of longest runway in hundreds of feet; usable length may be less.
When information is lacking, the respective character is replaced by a dash. Lighting codes refer to runway edge lights and may not represent the longest runway or full length lighting.

FSS
NO SVFR
(NAME) NAM (PNAM)
CT - 118.3 • Ⓐ ATIS 123.8
285 L 72 122.95
RP 23, 34
VFR Advsy 125.0
WX CAM
FAR 91
Location Identifier
ICAO Location Indicator shown outside contiguous U.S.
UNICOM
Weather Camera (AK)
Airport of Entry
AOE

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

Only the controlled and reserved airspace effective below 18,000 ft. MSL are shown.

Class B Airspace

Class C Airspace Mode C - see FAR 91.215(b/M.)

Class D Airspace

40 Ceiling of Class D Airspace in hundreds of feet (A minus ceiling value indicates surface up to but not including that value.)

Class E (sfc) Airspace

CLASS G Class E Airspace with floor 700 ft. above surface that laterally abuts Class G Airspace.

Class E Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E Airspace

Class E Airspace with floor 1200 ft. or greater above surface that laterally abuts Class G Airspace

2400 MSL / 4500 MSL Differentiates floors of Class E Airspace greater than 700 ft. above surface.

Class E Airspace exists at 1200' AGL unless otherwise designated as shown above. Class E Airspace low altitude Federal Airways and RNAV 2 Routes are indicated by center line. Intersection - Arrows are directed towards facilities which establish intersection.

7328 / 169 Total mileage between NAVAIDs on direct Airways

T319 / 11313 (Helicopter Only) / RNAV Waypoint

Prohibited, Restricted, and Warning Areas

*Alert Areas and Military Operations Area (MOA)

*Alert Areas do not extend into Class A, B, C and D airspace, or Class E airport surface areas.

Special Airport Traffic Area (See FAR 93 for details.)

National Defense Airspace

Temporary Flight Restriction Area

ADIZ - Air Defense Identification Zone

MODE C (See FAR 91.215/A/M.)

National Security Area

Terminal Radar Service Area (TRSA)

ATTN - Military Training Route

IR211 / VR1211

IFR Departure Route

IFR Arrival Route

IFR Arrival/Departure Route

COMMUNICATION BOXES

122.1R 122.6 123.6
OAKDALE
382 339.8 OAK

Underline indicates no voice on frequency.
Crosshatch indicates Shutdown status.
★ - Operates less than continuous or On-Request.
A - ASOS/AWOS

122.1R
FSS radio providing voice communication
MIAMI

Heavy line box indicates Flight Service Station (FSS). Frequencies 122.2 and 255.4 (Contentinuous U.S.) and 121.5, 122.2, 243.0 and 255.4 (Alaska) are available at many FSSs and are not shown above boxes. All other frequencies as shown.

R - Receive only

Frequencies above thin line box are remoted to NAVAID site. Other FSS frequencies providing voice communication may be available as determined by altitude and terrain. Consult Supplement for complete information.

122.6
CHICAGO CHI

RADIO AIDS TO NAVIGATION

VHF OMNI RANGE (VOR)
VOR-DME
DME
VORTAC
Other facilities, i.e., FSS Outlet, RCO, WX CAM (AA) (see Supplement), etc.
Non-Directional Radio Beacon (NDB)
NDB - DME

OBSTRUCTIONS

1000 ft and higher AGL

Above 200 ft & below 1000 ft AGL (above 299 ft AGL in urban area)

Wind Turbine

Group Obstruction

Wind Turbine Farm

2894 UC

Obstruction with high-intensity lights; may operate part-time

Under construction or reported; position and elevation unverified

2049 (1149) UC

NOTICE: Guy wires may extend outward from structures.

MISCELLANEOUS

A - Aerobatic Practice Area (See Supplement)

G - Glider Operations

H - Hang Glider Activity

U - Ultralight Activity

UA - Unmanned Aircraft Activity

Parachute Jumping Area (See Supplement.)

STADIUM
Intermittent TFR stby (within 3 NM, up to & incl 3000' AGL)

Marine Light

VPXYZ
VFR Waypoints

Space Launch Activity Area

Isogonic Line (2020 VALUE)

NAME (VPXYZ)

TOPOGRAPHIC INFORMATION

Power Transmission Line

Aerial Cable

Lookout Tower

616 (Elevation Base of Tower)

11623 (Elevation of Pass)

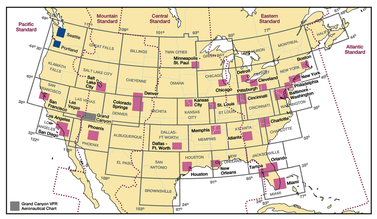
Pass symbol does not indicate a recommended route or direction of flight and pass elevation does not indicate a recommended clearance altitude. Hazardous flight conditions may exist within and near mountain passes.

SEATTLE/PORTLAND TAC
VFR TERMINAL AREA CHART SCALE 1:250,000

Federal Aviation Administration

EFFECTIVE 0901Z **29 DEC 2022**
TO 0901Z **23 FEB 2023**

Consult NOTAMs for latest information
Consult/Subscribe to FAA Safety Alerts and Charting Notices at:
http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/



Published from digital files compiled in accordance with Interagency Air Committee specifications and agreements approved by Department of Defense - Federal Aviation Administration.

Warning: Refer to current foreign charts and flight information publications for information within foreign airspace.

FAA Product ID: TSEA

NSN 7641014100126

NGA REF. NO. VFRTASEATTLE

EFF. DATE 22363

FOR PROCUREMENT: For digital products, visit http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/ For a list of approved FAA Print Providers, visit our website at: http://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/

REPORTING CHART ERRORS

You are requested to inform us of chart errors and/or additions that come to your attention while using this chart. See frequently asked questions (FAQs) on our website at http://faa.gov/go/ais/ prior to contacting us via toll free number at 1-800-638-8972 or visit https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/ or mail to: FAA, Aeronautical Information Services,1305 East-West Highway, SSMC 4, Suite 4400, Silver Spring, MD 20910-3281.

Lambert Conformal Conic Projection Standard Parallels 33° and 45°
Horizontal Datum: North American Datum of 1983 (World Geodetic System 1984)

Entire area of this chart is within the Pacific Standard Time Zone +8 (+7 DT) = UTC.

CONVERSION OF ELEVATIONS

FEET (Thousands) 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

METERS (Thousands) 0 1 2 3 4 5 6 7 8 9

GROUND ELEVATIONS IN FEET

14410 GLACIER 12000 9000 7000 5000 3000 2000 1000 Sea Level

CONTOUR INTERVAL 200' AND 500' CHANGING ON THE 500' INTERVAL

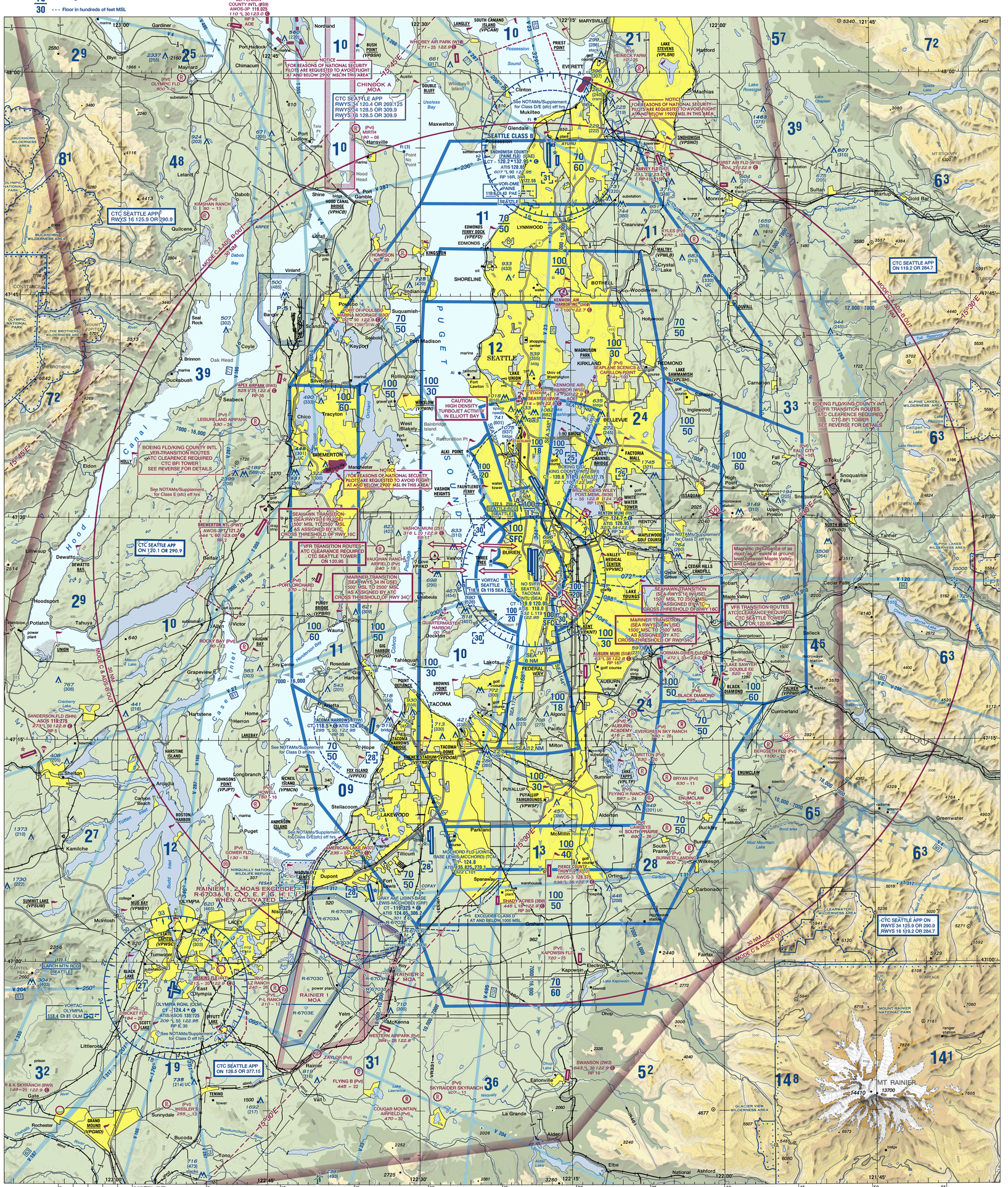
SEATTLE CLASS B AIRSPACE

See back of this chart for procedural information within the Seattle Class B Airspace

EXAMPLES OF CLASS B ALTITUDES

70 - - - Ceiling in hundreds of feet MSL

30 - - - Floor in hundreds of feet MSL



CONTROL TOWER FREQUENCIES ON SEATTLE TERMINAL AREA CHART

Airports with control towers are indicated on the face of the chart by the letters CT followed by the primary VHF tower frequency(ies). Information for each tower is listed in the table below. Operational hours are local time. The primary VHF and UHF tower and ground control frequencies are listed.

Automatic Terminal Information Service (ATIS) frequencies shown on the face of the chart are arrival VHF/UHF frequencies. All ATIS frequencies are listed in the table below. ATIS operational hours may differ from tower operational hours.

ASR and/or PAR indicate Radar Instrument Approach available.

"NON-FRI" indicates Monday through Friday.

O/I indicates other times.

CONTROL TOWER	OPERATES	TOWER	GND CON	ATIS	ASR/PAR
BOEING FLD/KING COUNTY INTL	CONTINUOUS	118.3 (RWY 14L/32R) 120.6 (RWY 14R/32L) 257.8	121.9	127.75	
GRAY AAF JOINT BASE LEWIS-MCCHORD	CONTINUOUS CLSD HOL	119.325 256.8	121.9 290.2	124.65 306.2	PAR
MCCHORD FIELD JOINT BASE LEWIS-MCCHORD	CONTINUOUS	124.8 359.3	118.175 279.65	135.825 270.1	
OLYMPIA RGNL	0800-2000	124.4 254.25	121.6	135.725	
RENTON MUNI	0700-2000 OCT-APR 0700-2100 MAY-SEP	124.7 256.9	121.6 256.9	126.95	
SEATTLE-TACOMA INTL	CONTINUOUS	119.9 239.3 (RWYS 16/34R, 16C/34C) 120.95 239.3 (RWYS 16R/34L)	121.7	118.0	
SNOHOMISH COUNTY (PAINE FLD)	0700-2100	120.2 (RWY 16/34R) 132.95 (RWY 16R/34L) 256.7	121.8 339.8	128.65	
TACOMA NARROWS	0800-2000	118.5 253.5	121.8	124.05	

CLASS B, CLASS C, TRSA, AND SELECTED APPROACH CONTROL FREQUENCIES

FACILITY	FREQUENCIES	SERVICE AVAILABILITY
SEATTLE CLASS B	119.2 284.7 (SEA RWYS 16 028°-160°; SEA RWYS 34 017°-079°)	CONTINUOUS
	120.1 290.9 (SEA RWYS 16 223°-289°; SEA RWYS 34 222°-301°)	
	120.4 269.125 (SEA RWYS 34 351°-340°)	
	125.9 290.9 (SEA RWYS 16 080°-313°; SEA RWYS 34 260°-133°)	
	126.5 377.15 (SEA RWYS 16 161°-222°; SEA RWYS 34 341°-202°)	
	128.5 306.9 (SEA RWYS 16 316°-027°; SEA RWYS 34 302°-016°)	

SPECIAL USE AIRSPACE ON SEATTLE TERMINAL AREA CHART

Unless otherwise noted altitudes are MSL and in feet. Time is local.
"TOI" on altitude means "To and including."
FL – Flight Level
NO A/G – Has o/r to ground communications.
Contact Flight Service for information.

† Other times by NOTAM.
NOTAM – Use of this term in Restricted Areas indicates FAA and DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.

U.S. P–PROHIBITED, R–RESTRICTED, W–WARNING, A–ALERT, MOA–MILITARY OPERATIONS AREA

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
P-51	TO BUT NOT INCL 2500	CONTINUOUS	NO A/G	
R-6703 A, B, C, D, E	TO 14,000	0700-2300 MON-FRI 12 HRS IN ADVANCE	SEATTLE TRACON	
R-6703 F, G, H, I, J	TO 5000	0700-2300 MON-FRI 12 HRS IN ADVANCE	SEATTLE TRACON	

MOA NAME	ALTITUDE*	TIME OF USE†	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
CHINOOK A	300 TO 5000	INTERMITTENT 2 HRS IN ADVANCE BY NOTAM SR-SS	WHIDBEY ISLAND NAS APP	118.2 285.65
RAINIER 1, 2	2000 TO 9000	INTERMITTENT BY NOTAM	SEATTLE TRACON	

*Altitudes indicate floor of MOA. All MOAs extend to but do not include FL180 unless otherwise indicated in tabulation or on chart. †Other times by DoD NOTAM.

ATTENTION

THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF). The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known feature in each quadrangle, including terrain and obstructions (trees, towers, antennas, etc.).

Example: 12,500 feet 12⁵

REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, BUREAU OF LAND MANAGEMENT AREAS AND U.S. FOREST SERVICE AREAS

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management or U.S. Forest Service (hereafter referred to as Agency/Agencies) without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government. All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Parks, Monuments, Seashores, Lakeshores, Recreational Areas, Scenic Riverways, Wildlife Refuges, Big Game Refuges, Game Ranges, Wildlife Ranges, Conservation Areas, Wild and Scenic Rivers, Wilderness Areas and Primitive Areas administered by the Agencies. FAA Advisory Circular (AC) 91-36, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the upper-most rim of a canyon or valley. Federal regulations also prohibit airdrops by parachute or other means of persons, cargo, or objects from aircraft on lands administered by the four agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life, or 2) threat of serious property loss.

Boundary of Agency Areas

NORTH AMERICAN AEROSPACE DEFENSE COMMAND (NORAD) PROCEDURES

All aircraft operating in the U.S. national airspace, if capable, will maintain a listening watch on guard frequencies VHF 121.5 or UHF 243.0. It is incumbent upon all aviators to know and understand their responsibilities if intercepted. Review "AIM" section 5-6-13 for intercept procedures. Additionally, if U.S. military fighter jets intercept an aircraft and flares are dispensed in the area of that aircraft, aviators will pay strict attention, contact air traffic control immediately on the local frequency or on VHF guard 121.5 or UHF 243.0 and follow the interceptor visual ICAO signals. Be advised that non-compliance may result in the use of force.

Flight Following Services are available on request and highly recommended in and around Class B, C, and TRSA areas.

Class G Airspace within the United States extends up to 14,500 feet MSL. At and above this altitude all airspace is within Class E Airspace, excluding the airspace less than 1500 feet above the terrain and certain special use airspace areas.

CAUTION: Unmanned Aircraft Systems (UAS) may be approved to operate above critical infrastructure including obstacles and linear features such as high-voltage powerlines, towers, and railroads. Check NOTAMs and see AIM for details.

CAUTION: This chart is primarily designed for VFR navigational purposes and does not purport to indicate the presence of all power transmission and telecommunication lines, terrain or obstacles which may be encountered below reasonable and safe altitudes.

CAUTION: Severe turbulence may occur over rugged terrain. See AIM.

Features normally used as checkpoints for controlling VFR traffic are emphasized on this series of charts so they may be readily identified.

Example: POWER PLANT

The name shown is that used by the controlling personnel and is not necessarily the official name of the feature.

MILITARY TRAINING ROUTES (MTRs)

All IR and VR MTRs are shown, and may extend from the surface upwards. Only the route centerline, direction of flight along the route, and the route designator are depicted - route widths and altitudes are not shown.

DoD users refer to Area Planning AP/1B Military Training Routes North and South America for current routes.

SEATTLE FLYWAY

VFR TERMINAL AREA CHART
SEATTLE/PORTLAND

SEATTLE/ PORTLAND

Airports having Control Towers are shown in Blue, all others in Magenta. Consult Chart Supplement for details involving airport lighting, navigation aids, and services. All times are local. For additional symbol information refer to the Chart User's Guide.

AIRPORTS

Other than hard-surfaced runways

Seaplane Base

Hard-surfaced runways 1500 ft. or greater

Open dot within hard-surfaced runway configuration indicates approximate VOR, VOR-DME, DME or VORTAC location.

All recognizable hard-surfaced runways, including those closed, are shown for visual identification. Airports may be public or private.

ADDITIONAL AIRPORT INFORMATION

Private "(Pvt)" - Non-public use having landmark value

Military - Other than hard-surfaced; all military airports are identified by abbreviations AFB, NAS, AAF, etc.

Heliport Selected

Unverified

Abandoned - paved having landmark value, 3000 ft. or greater

Ultralight Flight Park Selected

Fuel availability indicated by use of tick marks around basic airport symbol. Consult Supplement for details and availability at airports with hard-surfaced runways 1500 ft. or greater.

☆ Rotating airport beacon in operation Sunset to Sunrise

OBJECTIONABLE - Airport may adversely affect airspace use.

AIRPORT DATA

Box indicates FAR 93 Special Air Traffic Rules & Airport Traffic Patterns.

Runways with Right Traffic Patterns (public use)

*RP Special conditions exist - see Supplement.

FSS - Flight Service Station

NO SVFR - Fixed-wing special VFR flight is prohibited.

CT - 118.3 - Control Tower (CT) - primary frequency

★ - Star indicates operation part-time. See tower frequencies tabulation for hours of operation.

C - Follows the Common Traffic Advisory Frequency (CTAF)

ATIS 123.8 - Automatic Terminal Information Service

AFIS 135.2 - Automatic Flight Information Service (AK)

ASOS/AWOS 135.42 - Automated Surface Weather Observing Systems (shown where full-time ATIS not available). Some ASOS/AWOS facilities may not be located at airports.

UNICOM - Aeronautical advisory station

VFR Advsy - VFR Advisory Service shown where full-time ATIS not available and frequency is other than primary CT frequency.

285 - Elevation in feet

L - Lighting in operation Sunset to Sunrise

*L - Lighting limitations exist; refer to Supplement.

72 - Length of longest runway in hundreds of feet; usable length may be less.

When information is lacking, the respective character is replaced by a dash. Lighting codes refer to runway edge lights and may not represent the longest runway or full length lighting.

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

Only the controlled and reserved airspace effective below 18,000 ft. MSL are shown.

Class B Airspace

Class C Airspace (Mode C - see FAR 91.215/AIM.)

Class D Airspace

40 Ceiling of Class D Airspace in hundreds of feet (A minus ceiling value indicates surface up to but not including that value.)

Class E (sfc) Airspace

CLASS G Class E Airspace with floor 700 ft. above surface that laterally abuts Class G Airspace.

Class E Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E Airspace

Class E Airspace with floor 1200 ft. or greater above surface that laterally abuts Class G Airspace

2400 MSL / 4500 MSL Differentiates floors of Class E Airspace greater than 700 ft. above surface.

Class E Airspace exists at 1200' AGL unless otherwise designated as shown above.

Class E Airspace low altitude Federal Airways and RNAV 2 Routes are indicated by center line. Intersection - Arrows are directed towards facilities which establish intersection.

132° → V 69

Total mileage between NAVAIDs on direct Airways → 169

T 319 TK 313

(Helicopter Only) RNAV Waypoint

Prohibited, Restricted, and Warning Areas

*Alert Area and Military Operations Area (MOA)

*Alert Areas do not extend into Class A, B, C and D airspace, or Class E airport surface areas.

Special Airport Traffic Area (See FAR 93 for details.)

National Defense Airspace Temporary Flight Restriction Area

ADIZ - Air Defense Identification Zone

MODE C (See FAR 91.215/AIM.)

National Security Area

Terminal Radar Service Area (TRSA)

IR211 MTR - Military Training Route

IFR Departure Route

IFR Arrival Route

IFR Arrival/Departure Route

COMMUNICATION BOXES

122.1R 122.6 123.6 OAKDALE C 362★ 118.6 OAK

Underline indicates no voice on frequency.

- Crosshatch indicates Shutdown status.

★ - Operates less than continuous or On-Request.

A - ASOS/AWOS

122.6 CHICAGO CHI

Heavy line box indicates Flight Service Station (FSS). Frequencies 122.2 and 255.4 (Conterminous U.S.) and 121.5, 122.2, 243.0 and 255.4 (Alaska) are available at many FSSs and are not shown above boxes. All other frequencies are shown.

R - Receive only

122.1R MIAMI

FSS radio providing voice communication

Frequencies above thin line box are remoted to NAVAID site. Other FSS frequencies providing voice communication may be available as determined by altitude and terrain. Consult Supplement for complete information.

RADIO AIDS TO NAVIGATION

VHF OMNI RANGE (VOR)

VOR-DME

DME

VORTAC

Other facilities, i.e., FSS Outlet, RCO, WX CAM (AK) (see Supplement), etc.

Non-Directional Radio Beacon (NDB)

NDB - DME

OBSTRUCTIONS

1000 ft and higher AGL

Above 200 ft & below 1000 ft AGL (above 299 ft AGL in urban area)

Wind Turbine

Group Obstruction

Wind Turbine Farm

2894' UC

Elevation of the top above mean sea level 2049

Height above ground (1149)

Under construction or reported: position and elevation unverified UC

NOTICE: Guy wires may extend outward from structures.

Obstruction with high-intensity lights; may operate part-time

MISCELLANEOUS

A - Aerobatic Practice Area (See Supplement.)

G - Glider Operations

H - Hang Glider Activity

U - Ultralight Activity

UA - Unmanned Aircraft Activity

Parachute Jumping Area (See Supplement.)

STADIUM Intermittent TFR site (within 3 NM, up to & incl 3000' AGL)

Marine Light

VPXYZ VFR Waypoints

Space Launch Activity Area

−1°E− Isogonic Line (2020 VALUE)

NAME (VPXYZ)

TOPOGRAPHIC INFORMATION

Power Transmission Line

Aerial Cable

Lookout Tower

618 (Elevation Base of Tower)

Mountain Pass

11822 (Elevation of Pass)

Pass symbol does not indicate a recommended route or direction of flight and pass elevation does not indicate a recommended clearance altitude. Hazardous flight conditions may exist within and near mountain passes.

SEATTLE/PORTLAND TAC

VFR TERMINAL AREA CHART SCALE 1:250,000

Federal Aviation Administration

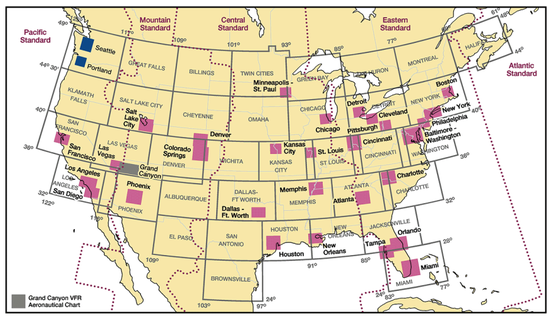
TM

EFFECTIVE 0901Z **29 DEC 2022**

TO 0901Z **23 FEB 2023**

Consult NOTAMs for latest information

Consult/Subscribe to FAA Safety Alerts and Charting Notices at:
http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/



Published from digital files compiled in accordance with Interagency Air Committee specifications and agreements approved by Department of Defense - Federal Aviation Administration.

Warning: Refer to current foreign charts and flight information publications for information within foreign airspace.

FAA Product ID: TSEA

NSN 7641014100126

NGA REF. NO. VFRTASEATTLE

EFF. DATE 22363

FOR PROCUREMENT: For digital products, visit http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/ For a list of approved FAA Print Providers, visit our website at: http://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/

REPORTING CHART ERRORS

You are requested to inform us of chart errors and/or additions that come to your attention while using this chart. See frequently asked questions (FAQs) on our website at http://faa.gov/go/ais/ prior to contacting us via toll free number at 1-800-638-8972 or visit https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/ or mail to: FAA, Aeronautical Information Services,1305 East-West Highway, SSMC 4, Suite 4400, Silver Spring, MD 20910-3281.

Lambert Conformal Conic Projection Standard Parallels 33° and 45°
Horizontal Datum: North American Datum of 1983 (World Geodetic System 1984)

Entire area of this chart is within the Pacific Standard Time Zone +8 (+7 DT) = UTC.

CONVERSION OF ELEVATIONS

FEET (Thousands) 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

METERS (Thousands) 0 1 2 3 4 5 6 7 8 9

VFR TRANSITION ROUTES

THIS CHART ALSO IDENTIFIES VFR TRANSITION ROUTES IN AND AROUND THE PORTLAND CLASS C AIRSPACE. THESE ROUTES ARE DEPICTED TO AID VFR PILOTS TO SAFELY OPERATE AND TRANSITION THE PORTLAND AIRSPACE. PILOTS ARE REQUIRED TO CTC THE APPROPRIATE ATC FACILITY PRIOR TO ENTERING CLASS C OR D AIRSPACE WHILE OPERATING ON VFR TRANSITION ROUTES. UNTIL AUTHORIZATION IS RECEIVED, REMAIN OUTSIDE THE CLASS C AIRSPACE. IT IS RECOMMENDED TO REQUEST VFR FLIGHT FOLLOWING WHILE OPERATING ON THESE ROUTES. ON INITIAL CONTACT, ADVISE ATC OF POSITION, ALTITUDE, ROUTE NAME, AND DIRECTION OF FLIGHT. PILOTS ARE RESPONSIBLE FOR THEIR OWN TERRAIN AND OBSTACLE SEPARATION WHEN OPERATING ON THE TRANSITION ROUTES.

VFR TRANSITION ROUTE

ATTENTION

THIS CHART CONTAINS MAXIMUM ELEVATION FIGURES (MEF). The Maximum Elevation Figures shown in quadrangles bounded by ticked lines of latitude and longitude are represented in THOUSANDS and HUNDREDS of feet above mean sea level. The MEF is based on information available concerning the highest known feature in each quadrangle, including terrain and obstructions (trees, towers, antennas, etc.).

Example: 12,500 feet 12 5

REGULATIONS REGARDING FLIGHTS OVER CHARTED NATIONAL PARK SERVICE AREAS, U.S. FISH AND WILDLIFE SERVICE AREAS, BUREAU OF LAND MANAGEMENT AREAS AND U.S. FOREST SERVICE AREAS

The landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management or U.S. Forest Service (hereafter referred to as Agency/Agencies) without authorization from the respective agency. Exceptions include: 1) when forced to land due to an emergency beyond the control of the operator, 2) at officially designated landing sites, or 3) on approved official business of the Federal Government. All aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of the following: National Parks, Monuments, Seashores, Lakeshores, Recreation Areas, Scenic Riverways, Wildlife Refuges, Big Game Refuges, Game Ranges, Wildlife Ranges, Conservation Areas, Wild and Scenic Rivers, Wilderness Areas and Primitive Areas administered by the Agencies. FAA Advisory Circular (AC) 91-36, "Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the upper-most rim of a canyon or valley. Federal regulations also prohibit airdrops by parachute or other means of persons, cargo, or objects from aircraft on lands administered by the four agencies without authorization from the respective agency. Exceptions include: 1) emergencies involving the safety of human life, or 2) threat of serious property loss.

. . . . . Boundary of Agency Areas

NORTH AMERICAN AEROSPACE DEFENSE COMMAND (NORAD) PROCEDURES

All aircraft operating in the U.S. national airspace, if capable, will maintain a listening watch on guard frequencies VHF 121.5 or UHF 243.0. It is incumbent upon all aviators to know and understand their responsibilities if intercepted. Review "AIM" section 5-6-13 for intercept procedures. Additionally, if U.S. military fighter jets intercept an aircraft and flares are dispensed in the area of that aircraft, aviators will pay strict attention, contact air traffic control immediately on the local frequency or on VHF guard 121.5 or UHF 243.0 and follow the interceptor visual ICAO signals. Be advised that non-compliance may result in the use of force.

Flight Following Services are available on request and highly recommended in and around Class B, C, and TRSA areas.

Class G Airspace within the United States extends up to 14,500 feet MSL. At and above this altitude all airspace is within Class E Airspace, excluding the airspace less than 1500 feet above the terrain and certain special use airspace areas.

REGULATORY NOTICES
PEARSON FIELD AIRPORT
SPECIAL RULE AREA FAR PART 93

Special air traffic rules and communications requirements are in effect for persons operating below 1100 feet MSL within the lateral boundary of the Special Flight Rules Area (SFRA) depicted for Pearson Field, Vancouver, WA.

Unless otherwise authorized by ATC, obtain the Pearson Field weather and establish two-way radio communications with Pearson Advisory on the common traffic advisory frequency (CTAF) prior to entering the SFRA, or taxiing onto the runway at Pearson Field Airport.

If two-way radio communications failure occurs in flight, a person may operate an aircraft within the SFRA, and land; if weather conditions are at or above basic VFR weather minimums; or if operating under IFR in compliance with § 91.185.

Unless otherwise authorized by ATC, persons operating an aircraft within the SFRA must; maintain an altitude at or below 700 feet above mean sea level when operating over the extended centerline of Pearson Field Runway 8/26; remain outside Portland Class C Airspace; and make a right traffic pattern when operating to/from Pearson Field Runway 26.

PORTLAND TERMINAL AREA CHART

EXAMPLES OF CLASS C ALTITUDES

70 - - - Ceiling in hundreds of feet MSL

30 - - - Floor in hundreds of feet MSL

CAUTION: Unmanned Aircraft Systems (UAS) may be approved to operate above critical infrastructure including obstacles and linear features such as high-voltage powerlines and railroads Check NOTAMs and see AIM for details.

CAUTION: This chart is primarily designed for VFR navigational purposes and does not purport to indicate the presence of all power transmission and telecommunication lines, terrain or obstacles which may be encountered below reasonable and safe altitudes.

CAUTION: Severe turbulence may occur over rugged terrain. See AIM.

Features normally used as checkpoints for controlling VFR traffic are emphasized on this series of charts so they may be readily identified.

Example: POWER PLANT

The name shown is that used by the controlling personnel and is not necessarily the official name of the feature.

MILITARY TRAINING ROUTES (MTRs)

All IR and VR MTRs are shown, and may extend from the surface upwards. Only the route centerline, direction of flight along the route, and the route designator are depicted - route widths and altitudes are not shown.

DoD users refer to Area Planning AP/1B Military Training Routes North and South America for current routes.

CONTROL TOWER FREQUENCIES ON PORTLAND TERMINAL AREA CHART

Airports with control towers are indicated on the face of the chart by the letters CT followed by the primary VHF tower frequency(ies). Information for each tower is listed in the table below. Operational hours are local time. The primary VHF and UHF tower and ground control frequencies are listed.

Automatic Terminal Information Service (ATIS) frequencies shown on the face of the chart are arrival VHF/UHF frequencies. All ATIS frequencies are listed in the table below. ATIS operational hours may differ from tower operational hours.

ASR and/or PAR indicate Radar Instrument Approach available.

"MON-FRI" indicates Monday through Friday.

O/T indicates other times..

CONTROL TOWER	OPERATES	TOWER	GND CON	ATIS	ASR/PAR
AURORA STATE	0700-2000	120.35	119.15	118.525	
PORTLAND-HILLSBORO	0600-2200	119.3 239.3	121.7	127.65	
PORTLAND INTL	CONTINUOUS	118.7 257.8 (RWY 10L/28R) 123.775 251.125 (RWYS 3/21 & 10R/28L)	121.9 348.6	128.35 269.9	
PORTLAND-TROUTDALE	0700-2200	120.9 254.3	121.8	135.625	

CLASS B, CLASS C, TRSA, AND SELECTED APPROACH CONTROL FREQUENCIES

FACILITY	FREQUENCIES	SERVICE AVAILABILITY
PORTLAND CLASS C	118.1 284.6 (100°-279°) 124.35 299.2 (280°-099°)	CONTINUOUS

VFR FLYWAY PLANNING CHART
SEATTLE
Scale 1:250,000
NOT TO BE USED FOR NAVIGATION

AIRPORTS
Paved Runways
NAME (NAM)
NAME (NAM)
Unpaved Runways
NAME (NAM)

RADIO AIDS TO NAVIGATION
VOR: DLG 138.8
NDB: DCW 262
VORTAC: PPS 121.8
NDB-DME: RMW 320
VOR-DME: KIP 110.7
DME: PVU CH 21 (108.4)

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION
- Class B Airspace
- Class C Airspace (Mode C - see FAR 91.215/AIM.)
- Class B/C Surface Area
- Prohibited, Restricted, and Warning Areas
- *Alert Area and Military Operations Area (MOA)

*Alert Areas do not extend into Class A, B, C and D airspace, or Class E airport surface areas.

Examples of Class B Airspace Altitudes
- 70 / 30 — Ceiling in hundreds of feet MSL / Floor in hundreds of feet MSL
- Mode C (See FAR 91.215/AIM.)
- Class D Airspace
- 40 — Ceiling of Class D Airspace in hundreds of feet (A minus ceiling value indicates surface up to but not including that value.)
- Class E (sfc) Airspace

- IFR Departure Routes
- IFR Arrival Routes
- IFR Arrival/Departure Routes

Suggested VFR Flyway and Altitude: 2600 | 6700

OBSTRUCTIONS (Selected): 2049

MISCELLANEOUS: Navigation Reference Point (N139° 56.32' W120° 36.91')

TOPOGRAPHIC INFORMATION: 12256 Mountain Top or Peak and Spot Elevation

VFR TRANSITION ROUTES

THIS CHART ALSO IDENTIFIES VFR TRANSITION ROUTES IN THE SEATTLE CLASS B AIRSPACE. OPERATION ON THESE ROUTES REQUIRES ATC AUTHORIZATION FROM SEATTLE APPROACH CONTROL. UNTIL AUTHORIZATION IS RECEIVED, REMAIN OUTSIDE CLASS B AIRSPACE. DEPICTION OF THESE ROUTES IS TO ASSIST PILOTS IN POSITIONING THE AIRCRAFT IN AN AREA OUTSIDE THE CLASS B AIRSPACE WHERE ATC CLEARANCE CAN NORMALLY BE EXPECTED WITH MINIMAL OR NO DELAY. ON INITIAL CONTACT, ADVISE ATC OF POSITION, ALTITUDE, ROUTE NAME DESIRED, AND DIRECTION OF FLIGHT. REFER TO CURRENT SEATTLE VFR TERMINAL AREA CHART FOR USER REQUIREMENTS.

VFR TRANSITION ROUTE
(ATC CLEARANCE REQUIRED)
ALTITUDE ASSIGNED BY ATC

THIS CHART IDENTIFIES VFR FLYWAYS DESIGNED TO HELP VFR PILOTS AVOID MAJOR CONTROLLED TRAFFIC FLOWS. IT DEPICTS MULTIPLE VFR ROUTINGS THROUGHOUT THE SEATTLE AREA WHICH MAY BE USED AS ALTERNATES TO FLIGHT WITHIN THE ESTABLISHED CLASS B AIRSPACE. ITS GROUND REFERENCES PROVIDE A GUIDE FOR IMPROVED VISUAL NAVIGATION. THIS IS NOT INTENDED TO DISCOURAGE REQUESTS FOR VFR OPERATIONS WITHIN THE CLASS B AIRSPACE BUT IS DESIGNED SOLELY FOR INFORMATION AND PLANNING PURPOSES.

CAUTION

THE ENTIRE SEATTLE AREA IS HEAVILY CONGESTED WITH MANY DIFFERENT AIRCRAFT TYPES. THESE ROUTE SUGGESTIONS ARE NOT STERILE OF OTHER TRAFFIC; THEY ARE AREAS WE BELIEVE LEAST CONGESTED IN AN AREA OF HEAVY CONGESTION. PILOT ADHERENCE TO VFR RULES MUST BE EXERCISED AT ALL TIMES. COMMUNICATIONS MUST BE MAINTAINED BETWEEN AIRCRAFT AND CONTROL TOWERS WHILE IN CLASS D AIRSPACE.

SEATTLE CLASS B AIRSPACE

OPERATING RULES AND PILOT/EQUIPMENT REQUIREMENTS. Regardless of weather conditions, an ATC authorization is required prior to operating within the Class B Airspace. Pilots should not request an authorization to operate within the Class B Airspace unless the requirements of FAR 91.215 and FAR 91.131 are met. Included among those requirements are:

1. Unless otherwise authorized by ATC, an operable two-way radio capable of communicating with ATC on appropriate frequencies for that Class B Airspace.
2. No person may take off or land a civil aircraft at an airport within the Class B Airspace or operate a civil aircraft within the Class B Airspace unless:
   (a) The pilot in command holds at least a Private Pilot certificate, or holds a Recreational Pilot certificate and has met the requirements of FAR 61.101(d); or holds a Sport Pilot certificate and has met the requirements of FAR 61.325, or:
   (b) The aircraft is operated by a student pilot who has met the requirements of FAR 61.94 or FAR 61.95 as applicable.
3. Unless otherwise authorized by ATC, each person operating a large turbine engine-powered aircraft to or from a primary airport shall operate at or above the designated floors while within the lateral limits of the Class B Airspace.
4. An operable VOR or TACAN receiver for IFR operations.
5. A transponder with automatic altitude reporting equipment.

NOTE: ATC may, upon notification, immediately authorize a deviation from the altitude reporting equipment requirement or for a transponder failure; however, other requests for deviations from the transponder equipment requirement must be submitted to the controlling ATC facility at least one hour before the proposed operation.

FLIGHT PROCEDURES

IFR FLIGHTS—Aircraft operating within the Seattle Class B Airspace must be operated in accordance with ATC clearances and instructions.

VFR FLIGHTS—

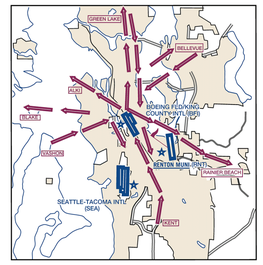
1. Arriving aircraft should contact the appropriate approach control on specified frequencies and in relation to geographic fixes shown on the accompanying chart. Although arriving aircraft may be operating beneath the floor of the Class B Airspace on initial contact, communications should be established with approach control in relation to the points indicated for sequencing and spacing purposes.
2. Aircraft departing the primary airports are requested to advise clearance delivery prior to taxiing of their intended altitude and direction of flight to depart the Class B Airspace. Aircraft departing from other than the primary airports whose route of flight would penetrate the Class B Airspace should give this information to ATC on the appropriate frequencies.
3. Aircraft desiring to transit the Class B Airspace must obtain an ATC clearance to enter the Class B Airspace and will be handled on an ATC workload permitting basis.

ATC PROCEDURES

All aircraft will be controlled and separated while operating within the Class B Airspace, except helicopters need not be separated from other helicopters. Although radar separation will be the primary standard used, approved visual and other nonradar procedures will be applied as required or deemed appropriate. Traffic information on observed but unidentified radar targets will be provided on a workload permitting basis to aircraft operating outside the Class B Airspace.

NOTE: Assignment of radar headings and/or altitudes is based on the provision that a pilot operating in accordance with visual flight rules is expected to advise ATC if compliance with an assigned route, radar heading, or altitude will cause the pilot to violate such rules.

BOEING FLD/KING COUNTY INTL VFR TRANSITION ROUTES



NORTH ARRIVALS

BELLEVUE
Contact BFI tower 118.3 east of downtown Bellevue.
Fly toward where the I-90 bridge meets Mercer Island, east of Mt. Baker tunnel.
Cross I-90 bridge at 1600' MSL, then fly direct to midfield right downwind.

GREEN LAKE
Contact BFI tower 118.3 over Green Lake.
Fly southeast toward the 520 floating bridge (47°38'26.87"N., 122°15'33.33"W.) and western Lake Washington shoreline.
From 520 bridge, fly via the shoreline until I-90 bridge (crossing I-90 bridge at 1200' MSL).
Enter right downwind.

KENT
Contact BFI tower 118.3 over Kent.
Fly northbound along SR-167 until abeam Valley Medical Center/IKEA at 1100' MSL.
Fly over the EAST side of the Renton Concrete Recyclers (47°28'40.9"N., 122°14'55.4"W.) to make a straight-in approach.

VASHON
Contact BFI tower 120.6 over North Vashon Island.
Fly eastbound (approx. ground track 080°) toward midfield Boeing Fld/King Co Intl airport.
After crossing the shoreline, descend to 1000' MSL or below.
Over the Duwamish River enter left downwind, maintain 800' MSL.

NORTH DEPARTURES

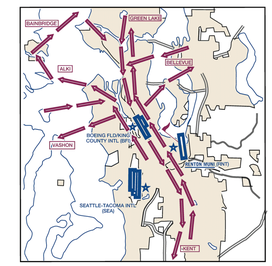
ALKI
Depart runway and as soon as possible, turn northwest bound to Alki Beach (approx. ground track 300°).
Cross over Alki Beach at or below 1500' MSL.

BELLEVUE
Depart runway and, when able, turn northeast bound to overfly Mt. Baker (I-90 bridge and western shoreline of Lake Washington) at 1600' MSL.
Once north of I-90 bridge, fly toward the north side of downtown Bellevue, then on course.

BLAKE
Depart runway and, when able, turn westbound toward Blake Island remaining at or below 1700' MSL.
Continue toward Blake Island and cross the shoreline at or below 1900' MSL.

GREEN LAKE
Depart runway and follow I-5 northbound at 1600' MSL remaining east of downtown Seattle.
Once abeam Lake Union, turn slightly left to pass just west of Green Lake then, on course.

RAINIER
Depart runway and, when able, make a right downwind departure to overfly Rainier Beach at 1500' MSL.
Expect frequency change from BFI tower to RNT tower prior to Rainier Beach.
At Rainier Beach, continue climb to 1900' MSL DIRECT to RNT airport.
Continue present heading to HWY-169 towards the Cedar Hills Landfill (47°27'22"N., 122°02'36"W.) until outside of RNT Class D airspace then, on course.



SOUTH DEPARTURES

ALKI
Depart full length, and when able, make a continous right turn to the downwind at or inside the Duwamish river while maintaining 700' MSL.
After passing the control tower, make a slight left turn toward Alki Point Lighthouse (approx ground track 300°) maintain at or below 1500' MSL.
Over the lighthouse, proceed to Restoration Point then, toward Bainbridge then, on course.

BELLEVUE
Depart runway, turn left downwind.
Once midfield, make a right turn to overfly where the I-90 Bridge meets Mercer Island maintaining between 1000'-1500' MSL.
Fly northeast bound to remain north of Mercer Island and south of downtown Bellevue

GREEN LAKE
Depart runway, make a left downwind departure to overfly Mt. Baker (I-90 bridge and western shoreline) at 1600' MSL.
Continue north to cross over University of Washington.
Remain EAST of I-5 passing Green Lake, then on course.

KENT
Depart runway southeast bound remaining east of I-5 and below 1100' MSL until abeam Renton Concrete Recyclers. (47°28'40.9"N., 122°14'55.4"W.)
Make a slight right turn to fly between Southcenter and railroad tracks to downtown Kent.

VASHON
Depart full length, and when able, make a continous right to the downwind at or inside the Duwamish river while maintaining 700' MSL.
After passing the white Boeing tent hangers, make a left turn westbound toward the north tip of Vashon Island (remaining south of Lincoln Park) and below the SEA Class Bravo airspace.

SOUTH ARRIVALS

BAINBRIDGE
Contact BFI tower 120.6 over Bainbridge Island.
Maintain at or below 1400' MSL and fly northeast bound to West Point (47°39'42"N., 122°26'13"W.).
Fly eastbound and join the ship canal to Lake Union.
Join I-5 southbound until turning approximately a 1 mile final.

BELLEVUE
Contact BFI tower 118.3 north of downtown Bellevue.
Fly toward Mt. Baker (where I-90 bridge meets western shoreline).
Cross Mt. Baker at 1100' MSL, enter left base.

BLAKE
Contact BFI tower 120.6 over Blake Island.
Fly eastbound to pass north end of Lincoln Park.
Report over Lincoln Park and expect sequence/landing instructions from tower.

GREEN LAKE
Contact BFI tower 118.3 over Green Lake, fly via I-5 southbound.
Maintain 1500' MSL abeam 520 floating bridge (47°38'26.87"N., 122°15'33.33"W.).
Continue I-5 southbound until turning a 1 mile final.

KENT
Contact BFI tower 118.3 over Kent.
Fly northbound along SR-167 until abeam Valley Medical Center/IKEA at 1300' MSL.
Fly over the east side of Renton Concrete Recyclers (47°28'40.9"N., 122°14'55.4"W.) to enter left downwind.